

Complete Listing of the Claims

This Complete Listing of Claims replaces all prior versions of claims in the subject application.

1. (Currently amended) A method of disinfecting or sterilizing an article, comprising the steps of:

placing the article into a container chamber;

reducing pressure in the container chamber to a first pressure;

introducing a mist comprising a sterilant into the container chamber;

diffusing the mist through the container chamber into contact with the article; and

wherein the first pressure is below atmospheric pressure and above the vapor pressure of the sterilant whereby to enhance diffusion of the mist throughout the container chamber.

2. (Currently amended) [[A]] The method according to claim 1 wherein the sterilant comprises hydrogen peroxide.

3. (Currently amended) [[A]] The method according to claim 2 wherein the mist comprises a solution comprising hydrogen peroxide and water.

4. (Currently amended) [[A]] The method according to claim 1 wherein the first pressure is at least 5 torr below atmospheric pressure.

5. (Currently amended) [[A]] The method according to claim 4 wherein the first pressure is at least 15 torr below atmospheric pressure.

6. (Currently amended) [[A]] The method according to claim 4 wherein the first pressure is at least 30 torr below atmospheric pressure.

7. (Currently amended) [[A]] The method according to claim 1 further comprising sterilizing the article.
8. (Currently amended) [[A]] The method according to claim 7 sufficiently efficacious to sterilize a stainless steel blade with at least  $10^6$  Bacillus stearothermophilus spores in less than 60 minutes.
9. (Currently amended) [[A]] The method according to claim 1 wherein the container chamber has an interior and the method further comprising sterilizing the interior of container ehamber.
10. (Currently amended) [[A]] The method according to claim 1 further comprising removing residual sterilant from the container chamber.
11. (Currently amended) A method of disinfecting or sterilizing an article, comprising: placing the article into an enclosure a-chamber; and reducing pressure in the enclosure chamber to a first pressure to disperse a mist comprising a sterilant throughout the enclosure chamber and into contact with the article.
12. (Currently amended) The method according to claim 11 wherein the reducing occurs prior to admission of the mist into the enclosure chamber.
13. (Previously presented) The method according to claim 11 wherein the reducing occurs using a vacuum.
14. (Previously presented) The method according to claim 12 wherein the sterilant comprises hydrogen peroxide.

15. (Previously presented) The method according to claim 12 wherein the mist comprises a solution comprising hydrogen peroxide and water.

16. (Previously presented) The method according to claim 11 wherein the first pressure is at least 5 torr below atmospheric pressure.

17. (Previously presented) The method according to claim 11 wherein the first pressure is at least 15 torr below atmospheric pressure.

18. (Previously presented) The method according to claim 11 wherein the first pressure is at least 30 torr below atmospheric pressure.

19. (Currently amended) The method according to claim 11 wherein once a vacuum is established, the mist is admitted into the enclosure chamber.

20. (Previously presented). The method according to claim 11 wherein the first pressure is a negative pressure.